

Geoscience, MS

The MS in geoscience is regarded by most hiring agencies as the working degree. The master's program in geoscience prepares students for employment in industry or for doctoral study.

Learning Outcomes

Graduates will demonstrate the ability to:

- develop subject matter expertise and broad knowledge in the field of geoscience;
- conduct research under the direction of a faculty member and interact successfully with other members of a research team;
- effectively communicate research findings in both written and oral formats;
- conduct all aspects of research and teaching with the highest ethical standards; and
- be prepared for career options in academia, industry, government, or other relevant fields.

Requirements

The Master of Science in geoscience requires a minimum of 30 s.h. of graduate credit. The MS is designed to be completed in two years, and students must maintain a Graduate College program grade-point average of at least 3.00. Students may count up to 8 s.h. of research credit toward the 30 s.h. required for the degree. They must earn at least 24 s.h. toward the degree in University of Iowa courses taken after they enroll in the program.

All entering students are required to enroll in SEES:7270 Orientation, Scholarly Integrity, and Responsible Conduct of Research during the fall semester of their first year in the graduate program.

During the second semester of study, each student should propose an advisory committee of at least three faculty members to the department chair for approval. Thesis students are responsible for obtaining their advisory committee's approval of a suitable program of coursework and for satisfactory development of research plans as outlined in a thesis proposal, which should be completed and approved by the department chair before the end of the second semester of full-time study. The thesis typically has depth and breadth similar to those of a published research paper. Thesis students must deliver a half-hour public presentation of their thesis followed by an oral defense.

Admission

Applicants for admission to the MS in geoscience should have a bachelor's degree in geoscience, earth science, or a related discipline relevant to the field. Depending on their prior training, graduate students may be required to take courses that are prerequisites for coursework in their chosen area of graduate study. For application information, contact the School of Earth, Environment, and Sustainability or visit their website.

All geoscience graduate students must meet the admission requirements of the Graduate College; see the Manual of Rules and Regulations on the Graduate College website. They also should acquaint themselves with the university

calendar and application deadlines within the School of Earth, Environment, and Sustainability.

Career Advancement

Career opportunities are readily available for geoscience graduates. Professional geoscientists work in environmental companies, resource companies, educational institutions, conservation agencies, state and federal agencies, and government resource and research organizations.

The Pomerantz Career Center offers multiple resources to help students find internships and jobs.

Academic Plans

Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

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| Course | Title | Hours |
|---|--|----------|
| Academic Career | | |
| Any Semester | | |
| 30 s.h. must be graduate level coursework; graduate transfer credits allowed upon approval. More information is included in the General Catalog and on department website. ^a | | |
| Graduate College program GPA of at least 3.00 is required. ^b | | |
| Hours | | 0 |
| First Year | | |
| Fall | | |
| CLAS:5100 | Practicum: College Teaching and Professional Development for Teaching Assistants | 1 |
| SEES:7000 | School of Earth, Environment, and Sustainability Research Colloquium | 1 |
| SEES:7270 | Orientation, Scholarly Integrity, and Responsible Conduct of Research ^c | 1 |
| Elective course ^d | | 3 |
| Elective course ^d | | 2 |
| Hours | | 8 |
| Spring | | |
| SEES:5010 | School of Earth, Environment, and Sustainability Foundations | 3 |
| SEES:5020 | Research Resources | 1 |
| SEES:7000 | School of Earth, Environment, and Sustainability Research Colloquium | 1 |
| Elective course ^d | | 3 |
| Hours | | 8 |
| Second Year | | |
| Fall | | |
| SEES:7000 | School of Earth, Environment, and Sustainability Research Colloquium | 1 |
| SEES:7990 | Graduate Research ^e | 4 |
| Elective course ^d | | 2 |
| Hours | | 7 |

Spring

| | | |
|--|--|-----------|
| SEES:7000 | School of Earth, Environment, and Sustainability Research Colloquium | 1 |
| SEES:7990 | Graduate Research ^e | 4 |
| Elective course ^d | | 2 |
| Exam: Master's Final Exam ^f | | |
| Hours | | 7 |
| Total Hours | | 30 |

a Students must complete specific requirements in the University of Iowa Graduate College after program admission. Refer to the Graduate College website and the Manual of Rules and Regulations for more information.

b Graduate College program GPA is comprised of all courses that are approved degree requirements. If a student takes more than the minimum required number of semester hours to complete the degree, but all courses taken are eligible to count toward the degree, those courses will be included in the Graduate College program GPA.

c Complete during first year fall semester.

d Courses selected should reflect the individual needs, interests, and talents of the student; work with faculty advisor to determine appropriate graduate elective coursework and sequence.

e Students may count up to 8 s.h. of research credit toward the 30 s.h. required for the degree.

f Consists of a half-hour public presentation of thesis followed by an oral defense.